1960

Rorschach Movement Responses of College Students: A Normative Approach

Burton Siegel
Loyola University Chicago

RORSCHACH MOVEMENT RESPONSES OF COLLEGE STUDENTS: A NORMATIVE APPROACH

by

Burton Siegel

A Thesis Submitted to the Faculty of the Graduate School of Loyola University in Partial Fulfillment of the Requirements for the Degree of Master of Arts

June

1960

LIFE

Burton Siegel was born in Chicago, Illinois, August 16, 1934.

He received a Twelfth Grade Certificate from the University of Chicago in June, 1953, whereupon he matriculated at Loyola University. He received a Bachelor of Science degree in June, 1957 and began his graduate studies in September, 1957.

ACKNOWLEDGMENT

This author is greatly indebted to Dr. Frank J. Kobler, his major professor, without whose thoughtful help and guidance, this thesis could not have been formulated and completed. The assistance of Miss Margaret Jacobs has also been invaluable with her suggestions and clarifications, as well as help in collecting data. Appreciation is also due to the project assistant, Miss Carol Rogalski who performed the tedious task of checking the tallying, the calculations, and, finally typing of the present thesis in its proper form.

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CHAPTER I

STATEMENT OF THE PROBLEM

The purpose of this thesis is to provide normative data on the movement responses in the Rorschach tests of "normal" college students. The methodological organization of this research represents the inclusion of more dimensions of movement responses than have heretofore been reported. Data concerning this area of research as reported in the literature are too meager and do not provide enough information for an adequate and extensive analysis of the movement response.

Almost all perceptanalytic investigators and theorists regard movement responses to be a result and indicator of such fundamental human behavior as inner resources, attitudes, role playing, capacity for and quality of object relationships, intelligence, creativity, physical buoyancy, and operations of all of these at different levels of personality integration and consciousness. The movement responses are human movement (M), animal movement (FM), and inanimate movement (m).[1] The human movement response on account of its revealing nature is historically and presently considered the most important of the Rorschach

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[1]The abbreviations M, FM, and m representing human movement, animal movement, and inanimate movement respectively will be used extensively in this thesis.

determinants. The other movement variables have only recently come under the scrutiny of Rorschach investigators. It is difficult to understand that with all the reported consensual agreement as to the importance of the movement responses, no extensive normative studies are reported in the literature. However, much research has been carried on to demonstrate the validity of definitive Rorschach variables. Basic information about the dimensions of movement responses seems needed. When investigated, as in this thesis, the approach is anticipated to disclose data revealing the attributes of movement and stimulating new areas of investigation. Thus, another more tangential purpose of this thesis is the suggestion for future research.

In summary, this thesis is to provide normative data about college students using a carefully described classificatory schema, and to suggest future research with the obtained data.

CHAPTER II

REVIEW OF THE LITERATURE

Defining Rorschach Movement Responses

Rorschach (1942) defines the movement response (M) as follows:

> Movement responses are those interpretations which are determined by form perceptions plus kinaesthetic factors. The subject imagines the object interpreted to be in motion....One should not be mislead, however, into considering each movement described or even demonstrated by the subject as indicating that the answer is kinaesthetically determined...the indication of motion is often only a rhetorical embellishment of the answer, a secondary association....The following may be taken as a rule: answers may be considered as kinaesthetically determined practically only when human beings or animals capable of motions similar to that of human beings (monkeys, bears) are seen in the figures (p. 25).

While most investigators of the Rorschach technique adhere to this general basic description of the movement response, many have made modifications with attempts to clarify the definition of movement in the Rorschach.

Beck (1944), who closely follows Rorschach, adds that an M response need not represent vigorous activity. He says, "In the action the protagonist may be (a) doing something, (b) having something done to him--passive M--or (c) in a pose or attitude involving only inner kinaesthetic experience. The extremes in this third group are sleeping persons, and even dead humans may be M" (pp. 93-94).

Phillips and Smith (1953) carry this modification a little farther

by scoring movement only when verbalized by the subject. Their rationale is that it is impossible in a clinical situation to ascertain whether a movement percept is actually kinaesthetically determined. This latter modification seems especially appropriate if Rorschachs are examined blindly and subjectivity minimized. Since the number of movement responses are relatively few in a Rorschach protocol, the accuracy in seeing them becomes of great importance. Piotrowski (1957) points this out and attributes the difficulty to Rorschach's original incompleteness in defining movement. He furthermore adds that the scoring of animal and inanimate movement to be a great advance over the original human movement scoring alone. Rorschach (1942) acknowledged other forms of movement but did not consider them "true" movement and scored them F tendency to M. Schachtel (1950) follows this closely and labels movement responses other than human as Mt or Movement tendencies.

Klopfer and Sender (1936) introduced a movement category for animals seen in motion and designated it as FM. Klopfer, Ainsworth, Klopfer, and Holt (1954) explicitly set forth the rules for scoring human movement (M), animal movement (FM), and the recently introduced inanimate movement response (m). Inanimate movement is scored when a non-animate object or an abstract quality of movement is seen. Piotrowski (1957) and Schachtel (1950) restrict their m scoring to inanimate movement exclusively. Contradictory evidence is presented as to the general agreement on scoring movement responses by different investigators by Hertzman and Pierce (1947) and Allen, Ray and Poole (1953).

Interpretations and Theories of Movement Response

Rorschach (1942) assigned interpretations reflecting intelligence, creativity, suggestibility, emotional stability, rapport, and empathy to the movement response. He viewed this response as multidimensional in character, but interpreted it in relation to the color responses. Wittenborn (1950), however, found that M responses were functionally different from color responses. The implications of Wittenborn's findings are contained in the following statement:

> The consistency among groups of human movement responses (as well as their relative independence from groups of color responses) may be taken as evidence that the total human movement response score could bear a valid relationship to an important feature of the personality which could not be predicted from a knowledge of the individual color response (p. 5).

Most investigators using the Rorschach technique agree with the formulation of Rorschach's six interpretative attributes cited above. Most of them have expanded or modified them slightly, but the vagueness of these terms still presents a stumbling block to validating research concerned with the various Rorschach hypotheses.

The problem of whether attitudes and feelings expressed in M responses are also manifested in overt behavior seems to have divided Rorschach investigators in two groups. On one hand, Rorschach (1942), Piotrowski (1957), and Phillips and Smith (1953) remark that the attitudes expressed in the movement response are reflected in overt behavior. On the other hand, Beck (1945) and Schachtel (1950) imply that it is never expressed in overt behavior. The difficulty here seems to be in the process of the interpretation of basic attitudes, which may be unconscious

or partially conscious, and how they appear in overt expression. Mirin's (1955) study tends to support this viewpoint and he concludes that the quality of M is reflected in ego-involved social situations. Schachtel (1950) states that while overt behavior is not traceable to movement response usually, if proper identification is made with the response by the subject, then the subject is partially or fully aware of his attitude. Identification here is not easily determined since he provides no criteria for its presence.

Animal movement has received less attention than human movement though its theoretical implications are agreed upon by most investigators. As Klopfer et al. (1954) express it, "FM responses indicate an awareness of impulses to immediate gratification which...tend to be impulses regarding which the person often lacks insight, understanding, and acceptance" (p. 265).

As well as indicating physical buoyancy, Piotrowski (1957) sees the FM as reflecting roles played early in life that are not influencing the subject's personality. The relationship between M and FM is given great importance by Klopfer et al. (1954) and Phillips and Smith (1953). By way of integration, FM is seen by this author as a genetic precursor to M, which lacks intellectual differentiation and emotional sophistication. It represents a certain amount of "flightiness" and lack of delay in impulse expression.

Inanimate movement has received little attention and no experimental validation. Generally, it is interpreted as awareness of tension or

conflict inplying a feeling of frustration (Klopfer et al., 1954; Piotrowski, 1957). Its presence also counterindicates low intelligence.

Normative Studies on the Rorschach Movement Responses

Normative data on the Rorschach response is generally meager as has been mentioned before. Data on the movement responses with respect to a normative approach is virtually absent. Phillips and Smith (1953) present some normative information on several dimensions of M and FM response. For the M response, they report a range of 2-4 for normals, a close correlation between W and M, and interpret departure from this range as an indicator of pathology. With respect to FM, they report area, content, and attitudinal characteristics of these responses. Tables 1-4 illustrate their findings. A major problem with the normative data that these authors present is the conspicuous absence of information on the population used. This author seriously questions the value and normative nature of these data. They appear more hypothetical and speculative than is desirable currently. Klopfer et al. (1954) also hypothesize normative data and again there is a conspicuous absence of information about their sample or procedure. These authors state that the normal state of affairs are reflected when M exceeds FM and where FM is not less than one-half of M. They confuse the issue of normative conclusions by remarking that other ratios are also commonly found in mature individuals. This author views this type of normative statement as quite misleading, since they seem to depend on an inadequately described criterion of "health" or "maturity," which is inferred to be similar to statistical normality.

TABLE 1

Normative Data for Frequent M[a]

Area in order of frequency with which M is elicited	Common forms[b]	Attitudes[b]	
		Universal	Unique
III, D_1	(1)male (2)neuter	(2) "looking at" or "facing each other" (3) "dancing"	(1) "lifting" "pulling" "straining" (4) "warming hands" (5) "bowing"
II, W (D_1)	(1)neuter (2)male	(1) "dancing"	(2) "patting hands" "playing patty-cake"
VII, W (or D_2)	(1)female (2)neuter	(1) "dancing" (3) "facing" or "looking at each other"	(2) "talking" "arguing" "gossiping" (4) "balancing"
IX, D_3	(1)female (2)neuter	none	none
I, D_4	(1)male (2)female[c]	(2) "standing"	(1) "hands up" "arms raised"
X, D_9	none common	none	(1) mouth functions, e.g. "smoking" "blowing"

[a]Phillips and Smith, 1953, p. 66.
[b]Parenthetical numbers indicate rank order frequency of occurrence.
[c]Women produce approximately equal proportions of male and female forms to this area.

TABLE 2

Normative Data for M of Medium Frequency[a]

Area in order of frequency with which M is elicited	Common forms	Attitudes[b]	
		Universal	Unique
I, D_2	female	"dancing"	none
III, D_2	male	"looking at" or "facing each other"	Mouth functions, e.g., "smoking" "tongues sticking out"
IV, W	male	none	(1) "leaning" "reclining" "sitting" (2) "lunging" "carrying off"
IV, D_7 (reversed)	female	"looking at" or "facing each other"	none
V, D_4	male	none	(1) "sitting" "lying down" "reclining" "leaning"
X, D_8	male neuter	none	none

[a] Phillips and Smith, 1953, p. 68.
[b] Parenthetical numbers indicate rank order frequency of occurrence.

TABLE 3

Normative Data for Frequent FM[a]

Area (in order of frequency with which FM is elicited)	Common forms (in order of frequency)	Attitudes (in order of frequency)
VIII, D_1	animal, bear, rat	climbing, stepping, walking
V, W	bat, butterfly, moth	flying in flight
II, D_1	bears, dog, animal	dancing, standing, facing, looking at each other, touching, patting(hands)
I, W	bat, butterfly, moth	flying, in flight

[a]Phillips and Smith, 1953, p. 87.

TABLE 4

Normative Data for FM of Medium Frequency[a]

Area (without regard to frequency with which FM is elicited)	Common forms	Attitudes
II, D_2	butterfly	flying, in flight
III, D_2	monkey, cat	running, falling
IV, W	gorilla	feet spread out, hunched, doubled up
VII, D_2	dogs, rabbits	standing, looking, facing each other, jumping
X, D_2	dogs, lions	barking
X, D_6	birds	flying
X, D_7	deer, frog	galloping, running, leaping
X, D_8	animal, bug, insect, beetle	eating, biting, standing, looking facing each other
X, D_{12}	sheep	jumping, leaping

[a]Phillips and Smith, 1953, p. 87.

Cass and McReynolds (1951) have similar views as to the status of statistical summaries on the various Rorschach variables. They express their frustration when examining studies and not being able to find enough data about the population used or find that the population number is small and unrepresentative. They also find it impossible to integrate data obtained from various studies because of the dearth of statistical and physical description.

There are several related and more empirical studies including the Rorschach movement responses. Table 5 is a summary illustrating the findings of the particular investigators of four studies with respect to human movement. Neff and Glaser's (1954) presentation investigates a total population of 100. Their findings demonstrate the tendency of normals to produce more M responses as well as more total responses than neurotics. The same tendency is indicated between the neurotic and psychotic groups. The differences are not significant though the authors state that their neurotic samples are not clinic patients and may be more "healthy" than the usually designated psychoneurotics appearing in the literature. Beck's scoring system is used in this study and an impractical feature of this system is its resistance to score M as contrasted to Klopfer's (1954) or the present author.

Wishner's (1948) sample involved 42 mixed neurotics and is presented in Table 5. Beck's system is also used here. Line and Griffin (1935) compared a "stable" group of 20 graduate students and an "unstable" group of 17 hospitalized patients. The authors remark that while differences in number of M are significant, the percentage of M with respect to total

TABLE 5

Statistical Values of M and (R) Found in Four Normative Studies

Group	Var.	Neff & Glaser		Wishner		Cass & McReynolds		Line & Griffin	
		M	(R)	M	(R)	M	(R)	M	(R)
Normal	N[a]	50	50			104	104	20	20
	Mean	5.8	42			3.0	24.6	5.4	58.8
	Mdn.	[c]		[d]		2.0	22.5	[c]	
	S.D.	4.3	22.0			3.1	13.5	3.3	18.8
Neurotic	N[a]	41	41	42	42				
	Mean	4.9	40.9	2.17	28.26				
	Mdn.	[c]		[c]		[d]		[b]	
	S.D.	4.9	26.2	2.7	14.52				
Psychotic	N[a]	9	9					17	17
	Mean	1.7	37.6					1.5	21.4
	Mdn.	[c]		[d]		[d]		[c]	
	S.D.	1.5	1.5					1.5	9.5

[a]Total number in population studied.

[b]Population were hospitalized and termed unstable in that study; placed in psychotic category by this author.

[c]No value reported.

[d]Not studied.

response (R) indicates the groups to be quite similar. The differences in production are quite at variance with those commonly reported in the literature reviewed by this author.

Cass and McReynolds (1951) present the only normative study in the literature that uses Klopfer's system. Their total population was divided into 58 males and 46 females. The mean educational grade completed was 11.2 (S.D., 2.4). The authors in arriving at their figures weighted main scoring categories as one and additional scoring categories as one-half. Using this approach, the resultant data on human movement is presented in Table 5. In addition to M, they also collected data for FM and m. The mean, median, and sigma for FM was 4.5, 3.5, and 3.3 respectively. The same values for m are 1.0, 0.5, and 1.6 respectively. These authors remark that skewness of their data suggest median values to be a more adequate representation of the sample performance. Their results resemble those generally reported in the literature with the exception of FM being greater in number than M. This study seemed to reflect the most critical thinking on the movement response from a normative approach.

Gardner (1936) investigating 100 nurses (70 females, 30 males), presents data on the number of movement responses given per card, though his definition of a movement response is vague. Mean age for the sample is 25.0 and range of I.Q. (AGEA, Form IX) is 85-115. He found the following order of M facilitation (from greatest to least): III, X, II, VI, I, VII, IX, IV, V.

The various Rorschach plates appear to differ with respect to the

ease with which movement responses are attributed to them. However, there appears to be some consistency in the order of frequency of responses. According to Phillips and Smith (1953) Cards II, III, VII, and IX are approximately equal in eliciting M, though they note that Cards I and X also facilitate M responses. Cards VI and VIII are found by these authors to be weakest in eliciting M responses. They also found FM to be most frequently elicited by Cards VIII, V, II, I (in rank order of frequency).

Ranzoni, Grant, and Ives (1950) conducted a study involving the stimulus facility for eliciting M and FM responses. They studied a population of adolescents at four different age levels, 11, 13, 15, and 18. Excluding minor genetic differences from consideration, Cards III, VII, and II were strongest in eliciting M responses; Cards V, VIII, and VI were the weakest. Cards VIII, V, and X ranked highest in eliciting FM responses; Cards IX and VI in the lowest ranks.

Allen (1953) studied the effects of color on the projection of human movement. The procedure he used involved the presentation of two sets of Rorschach Cards, one the standard set, the other entirely achromatic set. He found that color had no effect on the facility of yielding M responses since the frequency was the same for both groups. The cards ranging from most to least in order of M facilitation are IX, III, VII, II, I, V, IV, X, VI, VIII.

In summary, the definition of movement responses have become more operational in character, more delineating, and less subjective. The notion of a subject actually expressing a kinesthetic reaction is generally

ignored and only what he verbalizes is scored. The use of FM and m further distinguishes other forms of movement which are measurable. Most studies of the normative approach fail to give information on their population and procedure, rendering the resultant data as ambiguous. These studies also have failed to investigate dimensions other than number of movement responses per card, and per subject.

Some investigators, however, have described the particular responses (M, FM, m) in terms of the frequency in which they are elicited on various cards. Many authors quote normative expectancies not based on actual normative studies, but rather on personal experience or "logical analysis" which add further to the difficulty in understanding Rorschach data.

Notes on Methodology

Methodology in the research involving the Rorschach technique has been historically the most criticized of all facets of its development. Few criticisms, however, have offered better methodologies which is within the framework of possibility with the Rorschach. Beck (1950) made a plea for operationally defining the various Rorschach scoring categories, particularly M. In this way, the Rorschach scorings can be evaluated in terms of the operations by which a particular investigator uses them. This allows for future experimentation since the procedure becomes repeatable. While this may merely sound like typical experimental technique that is assumed in all research, it is surprising to note the wavering from this method with particular reference to Rorschach-involved investigations.

Cronbach (1949) in a classical article clarifies the difficulty in the statistical handling of Rorschach scoring categories. He explains their incorrectness and suggests means of presenting our evaluating data so that they are meaningful. He points out the problem of tests of significance with reference to "better-than-chance" conclusions. He remarks that the more hypotheses one tests out after the inspection of data, the more "better-than-chance" prediction will be found, though this is quite rroneously presented as actual significance. The actual process itself has a chance prediction that also must be taken into account. He also restates a familiar axiom, that skewed data cannot be treated with a statistical method that requires assumption of normality.

Cass and McReynolds (1951) take a position that more description of the population is needed and important. Furthermore, statistical terms for normative studies should present as a minimum, means, standard deviations, and the distribution of individual and group scores.

While not specifically related to problems of methodology, Piotrowski's studies (1952, 1957) illustrate a method for making finer distinctions while investigating particular dimensions of a scoring category. The problem of measuring the quantity and quality of effort projected into movement responses is undertaken and presented in operational form. He uses a scale of 1 to 6 points on a continuum with reference to the direction and force with which the percept yields or overcomes the force of gravity. Since this dimension is investigated in this thesis, it will be evaluated more thoroughly in later chapters.

CHAPTER III

PROCEDURE

Selection of Data: Source and Criteria

The Rorschach protocols used in this investigation were administered by graduate students as part of their training in accordance with requirements of a course in projective techniques. These protocols that have been accumulated over the past several years total approximately 1600. Of this total 200 were selected, 100 males and 100 females, by the criteria discussed below. In this selection each subject had to be between the ages of 17 and 25, as well as a full time White undergraduate student. The general manner in which these students had chosen to take a Rorschach was by a volunteering when a request had been made by instructors or graduate students. In an unpublished M.A. thesis, Kelly (1959) found no significant differences between students who volunteered and those who responded negatively to a request for volunteers. This tends to support the assumption that this sample is an adequate representation of the college population from which it is drawn.

Design and Methodology

Each protocol used in this study was examined, scored on the basis of Klopfer's scoring system, evaluated in terms of the movement dimensions,

and recorded on a specifically prepared tabulation sheet. A sample of this tabulation sheet is found in Appendix I, followed in Appendix II by an explanation of the various abbreviations used on the record form. The protocol was examined to find if all the criteria discussed in the foregoing section of this chapter were met. Furthermore, adequacy of test administration with respect to the inclusion of all factors necessary to appraise the response along the dimensions in this study were ascertained. Each protocol is identified by a code number, age of subject, sex, school attendance, grade, occupation, number of responses, average time of response, the date of administration, and the examiner's name and sex.

While Klopfer's (1954) scoring system (see Appendix III) with respect to M, FM, and m is used in this research, certain modifications were instituted by the author and the following operational definitions were used for designating a response under a particular movement category:

1.) M is scored when a whole or part of a human being is seen in motion or in a life-like state. This includes such responses as "people jumping," "dancing," "standing," "lying down," and "facial grimaces" and "arms swinging, feet kicking."

2.) FM is scored when a whole or part of an animal is seen in motion or in a life-like state. This includes such responses as "animal climbing," "begging," "wrinkling up its nose," "snarling," "lying down," "animal's feet kicking or clawing."

3.) m is scored for inanimate objects, whole or part, seen in

motion. This includes such responses as a "rocket ship taking off," "a ship plowing through the water," "a rock falling through the air."

The author's modification of Klopfer's criteria has as its purpose clarification and deliniation which make the resultant classification more communicable. The main departure from Klopfer is the restricting of m scoring to inanimate objects rather than including symbolic forces or responses indicating tension. According to Klopfer et al. (1954) m responses indicate the awareness of anxiety. While this may be quite accurate (no research has been done to validate it), Klopfer turns the interpretation into a criterion for the response. Thus, if the subject gives a response manifesting anxiety, e.g. "Hitler, with a sinister look on his face," he would score this as Fm. The author's scoring of this response would be M in accordance with the previously stated definition. The definition of m used in this study resembles Schachtel's (1950) and Piotrowski's (1957).

The amount of energy invested in the response is also appraised in this study. The importance of this aspect was of such a nature as to warrant an objective evaluation. The amount of energy invested in the movement response was developed under the term of <u>expansiveness</u> by Piotrowski (1952, 1957). Rorschach (1942) originated this dimension and referred to it as <u>flexor</u> or <u>extensor</u> movement. Piotrowski's (1952, 1957) scale of expansiveness involves a continuum of 1-6, from most aggressive to most submissive. His original scale included only M and FM and was

developed primarily to support the hypothesis that where FM is more expansive than M acting out destructive behavior will occur under states of lowered integration. The scale as it appeared in the literature lacked many refinements. A general criticism by this author was the lack of continuity and amount of subjectivity involved in placing movement under one of the degrees of expansiveness. The following is the scale used in this study for evaluating expansiveness:

Degree	Definition and Examples
1	Every response which expresses clear aggression, e.g. men fighting; women turning up their noses at each other; man ready to strike with a club; insects eating away flowers; bomb exploding.
2	Active movements of whole bodies in which the effect of gravity is overcome, but in which there is no apparent suggestion of aggression, e.g. walking; dancing; man drifting out of Aladdin's lamp; bear climbing; tiger crossing a stream. Whole body must move in space and must assert itself against the downward pull of gravity; flying; water fountain spraying.
3	Same as Degree 2 only part-body movement involved here, e.g. women talking over a fence (when only the upper parts of a body are perceived); pointing finger; animal's head raised; foot kicking; somebody (just the head) looking up; a woman (seen from the waist up) holding an object and keeping it from falling.
4	Restrained movements, that is, posture and movement that is forcibly restrained, (either whole or part-body) e.g. man with legs and hands tied together; soldier standing at attention; animals with horns tied together; an animal on the alert; standing; balancing; hanging.
5	Actively compliant movement, that is, responses in which the whole or part-bodies actively give in to the force of gravity, e.g. men bowing; women bending over their wash; a bird falling through the air.

Degree	Definition and Examples
6	Passive and plainly submissive movement, e.g. a dog begging; cows resting on the grass; people sleeping on a hillside; a child kneeling; a dog sleeping; praying (unqualified).

Popular movements are those particular responses which occur so statistically often, that they are relatively constant in normal populations. Populars for Klopfer et al. (1954) with respect to movement are:

1.) For M, Card III when most of the blot is seen as two people in some form of movement, and

2.) For FM, Card VIII where side detail (D_1) is seen as an animal in some form of movement.

Since other responses have been reported in a lecture by Kobler[1] and found by this author to be numerically common, the populars scored in this study are as follows:

Card		
I	(D_1)	M
II	(D_3)	FM
III	(W)	M
V	(W)	FM
VII	(D_4)	M
VIII	(D_1)	FM

The areas which are designated by letters and numbers in the

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[1]Professor of Psychology who taught a course in projective technique at Loyola University (1958).

parentheses are those listed by Klopfer et al., (1954).

Perhaps the most subjective of all scoring is the original response which is by definition a response occurring not more than once in 100 records. This scoring, then, is based on the experience of the author and another graduate student, making it somewhat arbitrary.

Form level, also, is somewhat more subjective than other modes of scoring. According to Klopfer et al. (1954) form level involves the fit or match of the percept to the blot (accuracy), specifications and level of organization. The author in this study used plus (+) to correspond to form levels above 1.0, zero (0) to correspond to form levels which were 1.0 or average, and minus (-) to correspond to form levels below 1.0.

The dimensions of projected sex and projected age level were also investigated (see Appendix II). With respect to projected sex, the following categories were delineated:

1.) the percept has the same sex as that of the subject

2.) the percept has the opposite sex as that of the subject

3.) both sexes were seen in the percept

4.) when subject verbalizes that either sex could be seen

5.) when the subject sees or verbalizes no sex at all in the percept.

With reference to projected age level, the following delineations were made:

1.) child was designated when the percept was a child or a young animal

2.) adult was designated when the percept was seen as an adult or

when the age level was not verbalized at all

3.) older person was designated when the percept involved old people or old animals.

Because the content of m does not imply age level or sex, it was not scored on these dimensions.

Other variables investigated and tabulated included the initial reaction time of each card, number of responses in which movement were seen, location of movement responses, whether a whole or part of a figure was seen, and the content of the response.

All tabulating was checked and rechecked with the assistance of another graduate student. Frequent discussions were held which sharpened the methodology and were incorporated in the research. At times this necessitated going over the data again to include more factors. All tallying and statistical summaries were checked and rechecked with the assistance of a project assistant to insure the accuracy of the data and the absence of errors.

CHAPTER IV

RESULTS AND DISCUSSION

The essential statistical data concerning the two groups of 100 males and 100 females are presented in Table 6. In comparison with Table 5 for normals, the data resulting from the present investigation resembles most closely that of Cass and McReynolds (1951) who were mentioned previously as the only investigators using Klopfer's system in their normative study. These authors, however, also included additional M's. This renders their data somewhat incomparable to the present study. The present study tends to support Klopfer's formulation as to the number of M (3-5 plus) occurring in a "normal" sample as discussed in Chapter II of this thesis.

Age and years of schooling are approximately equal for the subjects in both groups under study. This attribute of the sample minimizes the responsibility of differences as resting on other than cultural-sexual factors in comparing and contrasting the two groups.

With respect to median values, since they are most representative of these skewed distributions the resultant data suggests that the male group produce more total responses, more M's, the same number of FM's, and less m's than the female group. The male group with respect to number of responses (R)[1] M, FM, and m type, produced the following median values:

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[1](R) indicates total number of responses in a Rorschach protocol.

TABLE 6

Total R, M, FM, m, Age, Years of Schooling in Terms of Mean, Median, and Standard Deviation[a]

Variable	Mean		Mdn		S.D.	
	Male	Female	Male	Female	Male	Female
Total R	31.33	28.09	27.50	24.00	15.49	13.42
M	2.79	3.33	3.09	2.67	2.16	2.65
FM	2.96	2.89	2.45	2.45	2.33	2.25
m	.88	.73	.56	.96	1.08	.89
Age	20.23	19.88	20.81	20.93	1.77	1.78
Schooling	14.46	14.95	14.50	14.53	1.12	1.60

[a]N = 200; 100 males, 100 females.

27.50, 3.09, 2.45, and .56 respectively as compared with the female group which had the following median values: 24.00, 2.67, 2.45, and .96 respectively (see Table 6).

Since the production of R is mentioned by Cronbach (1949) as bearing a relationship to the production of M, each card is further described by the percentage of movement production taking into account total movement responses produced on the entire record (Table 7) and on the basis of all responses per card (Table 8). Absolute M, FM, and m production is shown on Table 7. The female group as represented in Table 8, produced more M with respect to R, the differences ranging from .3% to 8.89%, on all Rorschach Cards except Card IV, where males produced about 14% M. The females produced about 10% M of all responses per card.

FM production varied between the two groups similar to M. Males produced more FM on Cards II, III, VII, VIII, and X. The most notable differences are on Card IV and V where males gave about 10% FM and 15% FM respectively in contrast to the females who gave about 4% FM and 10% FM respectively. Both males and females produced about the same number of FM's on Card I. This is exemplified on Table 8. The production of m varied considerably though the numbers were small and significant trends would be difficult to ascertain without the use of more formal selective statistical methods. In general, m% was higher for males than females on Cards I, II, III, IV, VI, and VIII, while the m% was higher for females than males on Cards V, VII, IX, and X. The differences in m% for females and males ranged from .33% to 2.1% (see Table 8).

TABLE 7

Percentage of M, FM, and m Responses Produced on Each Card in Relation to Their Total Responses

Card	M				FM				m			
	Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I	16	6	28	8	12	4	10	3	7	8	2	3
II	27	10	33	10	42	14	44	15	14	16	7	10
III	83	30	90	27	16	5	20	7	8	9	1	1
IV	19	7	22	7	14	5	9	3	4	5	5	7
V	9	3	19	6	38	13	20	7	1	1	4	5
VI	5	2	16	5	15	5	8	3	10	11	7	10
VII	58	21	53	16	16	5	23	8	7	8	8	11
VIII	6	2	7	2	58	19	67	23	7	8	2	3
IX	32	12	38	11	15	5	7	2	25	28	30	41
X	22	8	30	9	73	24	88	30	5	6	7	10
Total	277	101[a]	336	101[a]	299	99[a]	296	101[a]	88	100[a]	73	101[a]

[a]Rounding off numbers yield totals ranging from 99-101%.

TABLE 8

Percentage of M, FM, m of Total Responses Per Card

Card	M		FM		m	
	Male	Female	Male	Female	Male	Female
I	6.13	11.66	4.59	4.16	2.68	.83
II	9.74	15.06	15.16	20.09	5.05	3.19
III	25.85	34.74	4.98	7.72	2.49	.38
IV	14.07	10.28	10.37	4.20	2.96	2.33
V	3.64	9.35	15.38	9.85	.40	1.97
VI	1.70	6.40	5.10	3.20	3.40	2.80
VII	23.48	23.98	6.47	10.40	2.83	3.61
VIII	1.75	2.44	16.95	23.42	2.04	.69
IX	9.84	12.02	4.61	2.21	7.69	9.49
X	4.14	5.48	13.74	16.08	.94	1.27

The amount of energy, as measured by "expansiveness," showed variability in the M category seen in Table 9. For both groups, responses on Card III were distributed over the entire continuum from 1 to 5. Cards VII and IX elicited responses distributed over the continuum from 1 to 4. Agression responses, that is under expansiveness 1, were most readily elicited on Cards VII, III, II, and IX (in rank order) with differences between males and females ranging from 1 to 2. Passive responses, that is expansiveness 5 and 6, were most readily elicited on Cards III, IV, and V (in rank order), with differences between male and female groups and varying between 1 to 3.

The amount of energy invested in FM responses show more inter-group variability in the aggressive-assertive range (expansiveness 1 and 2) as indicated in Table 10. Aggressive responses are most common with both groups on Cards X, VIII, and II. Males tend to show more aggressive content on Cards V, VI, IX, with differences ranging from 1-8, while females show more aggressive content on Cards I and VII, with differences ranging from 1-5.

The sex attributed to the human movement percepts seen are indicated on Table 11. Both groups seem to verbalize a neuter quality to the percepts (or not mention a particular sex at all). In general, Card IV is seen mainly as a male percept and Card VII as a female percept by both groups. Card III is seen by the male group as being a male about 50% of the time (when a particular sex is specified). Under the same conditions, the female group sees the percepts as males about 66% of the time.

TABLE 9

Expansiveness of M Per Card

Card	1		2		3		4		5		6	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
I	2	4	4	12	4	4	6	7	0	0	0	1
II	5	3	12	14	3	10	7	4	0	0	0	2
III	6	8	39	50	12	10	8	15	18	17	0	0
IV	0	1	3	4	2	1	9	12	1	2	4	1
V	0	0	5	8	0	4	3	4	0	0	1	3
VI	0	1	0	1	3	5	1	8	0	0	1	1
VII	7	8	19	22	18	12	13	10	1	1	0	0
VIII	1	2	4	1	0	0	1	2	0	1	0	1
IX	5	3	10	6	9	17	5	12	2	0	1	0
X	2	3	7	16	6	5	5	3	2	1	0	2

TABLE 10

Expansiveness of FM Per Card

Card	1		2		3		4		5		6	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
I	0	2	7	6	4	1	1	1	0	0	0	0
II	12	9	16	16	8	13	4	6	1	0	1	0
III	3	1	5	7	1	2	5	8	2	2	0	0
IV	1	2	8	2	2	2	1	1	2	1	0	1
V	8	0	21	11	5	4	3	3	0	1	1	1
VI	4	1	4	3	3	1	3	1	0	0	1	2
VII	1	3	4	9	5	6	5	5	0	0	1	0
VIII	9	6	41	54	3	5	5	1	0	0	0	1
IX	4	1	4	0	2	2	4	4	0	0	1	0
X	20	23	34	40	5	10	7	12	1	1	6	2

TABLE 11

Projected Sex in M Per Card

Card	Same		Opposite		Either		Both		Neuter	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
I	5	7	3	4	0	0	1	0	7	17
II	9	5	2	2	0	1	0	0	16	25
III	20	12	23	35	2	0	0	1	38	42
IV	12	2	2	11	0	1	0	0	5	9
V	3	9	1	3	0	0	0	1	5	6
VI	1	2	1	8	0	0	0	0	3	6
VII	8	31	27	3	0	0	0	0	23	19
VIII	1	1	1	1	0	0	0	0	4	5
IX	13	9	7	8	0	0	0	0	12	21
X	2	6	5	3	0	1	0	0	15	20

Projected age level in M, as shown in Table 12, indicates that the most variability for both groups seems to be on Card VII. On this card there are relatively large numbers of child, older person, as well as adult projections. In general, there is a tendency to project older people on most cards more frequently by the female group. Females have 18 "older person" projections as contrasted to the males who had 11 "older person" projections. There is an absence of child-age percepts on Cards IV and VIII.

The projected sex in FM percepts show less variability than M percepts as illustrated by Table 13. Males show a tendency to project child's age percepts into Cards II and VIII, but in both groups, generally, the preponderance of sex identification falls into the neuter category. The age level of the FM percept falls into the adult category by both groups as indicated in Table 14.

The expansiveness of m does not indicate any trends upon inspection of Table 15. However, there is noted a preponderance of m percepts on Card IX and furthermore, they fall in the aggressive-assertive category. Males gave more purely aggressive responses (expansiveness 1) than females, yielding a difference of 8 responses.

The production of popular concepts is approximately equal for both groups as indicated by Table 16 (males yield 198; females yield 201). The production of original percepts indicates the female group as having a larger quantity than the males, the females producing 100, as contrasted to the males' production of 62. Since this is a somewhat arbitrary category

TABLE 12

Projected Age Level in M Per Card

Card	Child		Adult		Older Person	
	Male	Female	Male	Female	Male	Female
I	0	1	15	27	1	0
II	1	2	25	29	1	2
III	3	2	80	86	0	2
IV	0	0	18	19	1	3
V	3	1	6	18	0	0
VI	0	0	4	16	1	0
VII	15	19	37	29	6	5
VIII	0	0	6	6	0	1
IX	3	6	28	28	1	4
X	4	6	18	23	0	1

TABLE 13

Projected Sex in FM Per Card[a]

Card	Same		Neuter	
	Male	Female	Male	Female
I	0	0	12	10
II	3	1	39	43
III	0	0	16	20
IV	0	0	14	9
V	1	1	37	18
VI	0	0	15	8
VII	0	1	16	22
VIII	2	0	56	67
IX	0	1	15	6
X	0	1	73	85

[a]On Card IV, there was one response under "either" for females. On Card X, there were two responses under "opposite" for females.

TABLE 14

Projected Age Level in FM Per Card

Card	Child		Adult		Older Person	
	Male	Female	Male	Female	Male	Female
I	0	0	12	10	0	0
II	3	2	39	41	0	1
III	0	1	16	19	0	0
IV	0	0	14	9	0	0
V	0	0	37	19	1	1
VI	0	1	15	7	0	0
VII	2	3	14	20	0	0
VIII	1	0	57	66	0	1
IX	1	0	14	7	0	0
X	0	1	78	85	0	2

TABLE 15

Expansiveness of m Per Card

Card	1		2		3		4		5	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
I	3	1	2	1	2	0	0	0	0	0
II	4	3	7	4	0	0	0	0	3	0
III	1	0	2	1	0	0	1	0	4	0
IV	0	0	2	1	0	1	0	1	2	2
V	0	0	0	2	0	0	1	1	0	1
VI	4	1	4	3	0	0	0	2	2	1
VII	1	0	3	5	0	0	2	1	1	2
VIII	1	1	3	0	0	0	0	0	3	1
IX	13	5	10	24	1	1	0	0	1	0
X	0	2	4	3	1	0	0	0	0	2

TABLE 16

Number of Populars and Originals Produced on Each Card

Card	Populars		Originals	
	Male	Female	Male	Female
I	6	7	4	3
II	27	30	2	8
III	67	67	3	7
IV	a	a	3	12
V	12	9	7	9
VI	a	a	7	11
VII	41	33	5	7
VIII	45	55	6	8
IX	a	a	14	17
X	a	a	11	18
Total	198	201	62	100

[a]No populars are designated for these cards.

depending on the experience of the investigator, interpretation should be made cautiously.

The number of percepts seen as a part of a figure or as a whole figure do not seem to differentiate the two groups as illustrated by Table 17.

The cards which elicit M's with most facility, in rank order, are Cards III, VII, IX, and II. FM are produced most frequently on Cards X, VIII, and II. Production of m is found highest on Cards IX, II, and VII.

TABLE 17

Number of Part and Whole Responses Per Card

Card	Part		Whole	
	Male	Female	Male	Female
I	11	6	24	34
II	25	22	58	62
III	4	7	103	104
IV	7	6	30	30
V	10	12	38	30
VI	4	8	26	23
VII	23	22	58	62
VIII	1	4	70	72
IX	11	18	61	58
X	8	8	92	117
Total	104	113	560	592

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this thesis is to develop a classificatory schema for the Rorschach movement responses, that is, human movement (M), animal movement (FM), and inanimate movement (m), which will provide normative information on more dimensions of these responses than have heretofor been reported. While most "perceptanalytic" investigators regard the movement responses, especially human movement, to be a result or indicator of empathy, insight, physical buoyancy, tension, and creativity, few studies have investigated from a normative point of view, the dimensions outlined in this research. An important by-product of the data accumulated in this study will be suggestions and implications for future research.

A number of investigators and theorists have presented their attitudes about the Rorschach movement variable. Phillips and Smith (1953) has attempted to provide norms on movement responses, that is M and FM, but fail to report the procedure used, the population which their data represents, and statistical expressions which would better describe their data. Klopfer et al. (1954) report certain quantities to be expected of M, FM, and m on the Rorschach, but again fail to discuss procedure, population, or present statistical summaries of their work. It seems that many of these conclusions are sensitive, intuitive accumulations of data,

but lacking an adequate presentation of procedure or description of population from which it is drawn.

Of the few studies reported in the literature, only Cass and McReynolds (1951) investigate movement using Klopfer's scoring system. They report data on M, FM, and m giving mean, median, and standard deviation for normal subjects. They make a plea for better statistical presentation of Rorschach research as well as a thorough description of the population. This study appeared to reflect the most critical thinking with reference to a normative approach.

In the present thesis, the author investigates 200 college students, 100 female and 100 male. Their mean age is about 20 and the mean school years completed is about 14.5. These students have volunteered to take the Rorschach test after a request by instructors or graduate students. The testing is a required part of a course in projective technique. Since the examiner is a neophyte, some invalidity is expected with regard to Rorschach production. The invalidity would occur in the inquiry since this requires the most active and tactful role of the administrator. For this reason, only movement that occurred in the response proper has been evaluated. A further check on the examiners were the inspections of the protocols for adequate information about the subject and general mode of administration. The protocols were then rescored and evaluated on the basis of the following dimensions: whether the response is of the M, FM, or m type, the card on which it occurs, the projected sex and age level, the amount of energy invested in the response (termed <u>expansiveness</u> and

rated on a scale of 1 to 6, from aggressive to submissive), the popularity of the response and the originality. After the data were collected, tables were prepared which permitted examination of a number of variables and provided for comparisons between male and female groups as well as noting intra-group variability.

The major conclusions drawn from the research are the normative data it presents. The production of total responses is somewhat higher for males (median value: 27.50) than for females (median value: 24.00). The amount of human movement was elicited somewhat more frequently by males (median value:3.09) than females (median value: 2.67). The converse was true for inanimate movement, where the females gave .96 (median) and the males gave .56 (median) responses. FM production was about the same for both groups and very nearly approximate quantities of M. M, FM, and m production was compared on two basis, absolute values and in relation to response per card (percentages). Those cards which presented the most facility for M responses, in rank order are III, VII for both groups; IV, IX, II, X for males and II, IX, I, IV for females. FM production was highest on Card VIII for both groups; V, II, X for males, and II, X, V for females. Production of m was highest on Card IX and showed wide variability between the groups when responses per card were taken into consideration.

Expansiveness of M showed some variability between groups, but the dispersion of scores along the entire continuum was especially noted in Card III, where it is suggested that this card appears to allow a wide

range of positions when the popular figure is seen. The expansiveness of FM showed less variability and significance than M, though Cards II, VIII, IX, and X indicated differences between male and female.

With respect to the sex projected into the response, Card IV was seen as a male percept most frequently by both groups. Card III was seen as a male 50% by males, and 66% by females.

Projected age level in M shows most variability on Card VII where all categories are alluded to, i.e. child, adult, older person. The female group tends to elicit more older person percepts, but this is scattered throughout the cards rather than being concentrated on few cards.

Production of popular percepts is about equal for both groups. However, the production of original responses is higher for females than males, yielding a difference of 38 responses.

Future research with the obtained data could take on the form of correlations of the various factors isolated in the current research. This would not only provide more normative information about the various relationships of these factors, but provide hypotheses for future research. For example, finding the correlation between expansiveness and M, or projected sex and projected age level of percepts could give significant data about role playing as an aspect of personality which the movement responses are alleged to reflect. Content analysis, also possible with current data, would help clarify this aspect of research.

Using other data, for example color, and comparing present findings to color production in the same protocols, also could cast much light on

the M : sum C hypothesis. Comparison of this sample with psychoneurotic and psychotic groups might also be valuable in yielding many cues of diagnostic importance.

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APPENDIX I

CODE: _____ SEX: _____ SCHOOLING: _____ R: _____ EX.: _____

AGE: _____ RACE: _____ IQ: _____ T/R: _____ SEX: _____ DATE: _____

									Type					Expansiveness						Projected Sex					Age Level							
	HT	R/c	R//	Po	Lo	Ad	Pt	Wh	M	Fl	m	Si	Bl	1	2	3	4	5	6	Sa	Co	Ei	N	Bth	C	A	OP	P	O	FL	Content	Abstract
I																																
II																																
III																																
IV																																
V																																

APPENDIX II

EXPLANATION OF ABBREVIATIONS USED IN TABULATION SHEET FOR MOVEMENT RESEARCH

IRT	Initial reaction time
R/c	Responses per card
R#	Response number in which movement appears on card
Po	Position of card
Lo	Location, using Klopfer's areas
Pt	The figure seen is in part only (e.g. man swinging arms, you can see him from the waist up; those typically scored Hd or Ad).
Wh	Whole figure is seen (H or A; the figure is complete).
M	Human movement
FM	Animal movement
m	Inanimate movement
Expansiveness	1-6 continuum
Sa	Same sex of subject is projected into blot.
Op	Opposite sex of subject is projected into blot.
Ei	Subject states figure of blot is either male or female.
N	No sex identification projected into blot. This is assumed when subject does not mention a particular sex or in animal movement unless sex is specified. (Neuter)
Bth	Subject sees both sexes in blot (e.g. a man and a woman dancing, Card III).

C	Subject states projected figure is child or a diminutive form of a particular animal.
A	Adult; subject states projected figure is an adult or adult's age. This category is assumed when no other information is given concerning the age level of the projection. (Including animal movement)
OP	Older Person; subject states projected figure is an older person.
P	Popular response
O	Original response (a movement response that is found only once in 100 records)
FL	Form Level: + for better than average - for below average 0 for average
Content	Specific content of response
Abstract	Actual wording of the part of the response that includes the mention of the movement

APPENDIX III

KLOPFER'S CRITERIA FOR M, FM, AND m RESPONSES

1. M, or Human Movement: Score a Main M

Score a main M for the inclusion of a kinesthetic quality in human concepts. The following are instances where M is scored:

a. Score a main M for human beings seen in action, even if the reality of the human figures is qualified by describing them as caricatures, drawings, "petit point," statues, or the like.

b. Score a main M for human beings seen in any live posture, unless the reality of the human figure is qualified as a drawing, statue, and so on.

c. Score a main M for human-like movement in animals such as fairy-tale creatures or Walt Disney animals. However, do not score M for movement in trained animals, such as a trained dog, age, or seal.

d. Score a main M for movement controlled by an individual (for instance, person whirling with skirts blowing) even though the subject's statement includes reference to "wind"--which on the face of it implies inanimate movement.

e. Score a main M for parts of human beings seen in action.

f. Score a main M for a human face with an expression, provided it is distinctly lifelike and is not considered a symbol of some abstract force.

2. FM, or Animal Movement: Score a Main FM

a. Score a main FM for animals in movement of an animal-like nature, even if qualified as caricatures, drawings, ornaments, and so on.

b. Score a main FM for animals in a lifelike posture, provided that there is not further qualification of the animals as caricatures, drawings, statues, ornaments, and the like. There should be some dynamic aspect to the animal; if still, it should

be sleeping, resting, about to pounce, or in some lifelike posture.

c. Score a main FM for parts of animals in animal-like action.

d. Score a tendency to FM if the movement or posture is very weak or if the animal in action (or posture is at the mercy of inanimate forces, or both.

3. m, or Inanimate Movement: Differentiation between Fm, mF, and m

There are three scoring categories included under m, representing three degrees of differentiation in form perception.

a. Score Fm if the object that is moving or being moved has definite form, such as a spinning top, an aircraft flying.

b. Score mF if the object that is moving or being moved is of indefinite or semi-definite shape, such as tongues of flame leaping, clouds swirling.

c. Score m if there is no form, only movement (kaleidoscopic movement, abstract force, and the like).

APPROVAL SHEET

The thesis submitted by Burton Siegel has been read and approved by three members of the Department of Psychology.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

July 7, 1960
Date

Frank A. Geldard
Signature of Adviser